

REMARKS

The Examiner is thanked for the thorough review and consideration of the present application. The non-final Office Action dated September 21, 2004 has been received and its content carefully reviewed.

By this Response, claims 1 and 20 have been amended. No new matter has been added. Claims 1-9 and 11-27 are pending in the application with claims 12-19 being withdrawn from consideration. Reconsideration and withdrawal of the rejection in view of the above amendment and the following remarks are respectfully requested.

In the Office Action, claims 1-9, 11 and 20-27 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,144,435, issued to Yokoyama et al. (hereafter "Yokoyama") in view of U.S. Patent No. 5,956,009 or 6,175,348, issued to Zhang et al. (hereafter "Zhang"). Applicant respectfully traverses the rejection because neither Yokoyama nor Zhang, analyzed alone or in any combination, teaches or suggests the combined features recited in the claims of the present application. For example, Yokoyama and Zhang fail to teach or suggest an in-plane switching mode liquid crystal display device that includes, among other features, "a plurality of common electrodes and data electrodes on the first substrate, wherein the common and data electrodes apply an electric field to the liquid crystal layer that is parallel to the first substrate; and at least one dummy pattern overlapping at least one portion of the data lines for repairing an open region of the data lines" as recited in independent claim 1 of the present application.

The Office Action concedes that Yokoyama fails to disclose all the limitations recited in the claims of the present application and relies upon the teachings of Zhang to remedy the deficient teachings of Yokoyama. Based upon the teachings of Zhang, the Office Action alleges that it would have been obvious to one of ordinary skill in the art to "include Zhang's dummy pattern overlapping at least one portion of the data lines in Yokoyama's device." Applicant respectfully disagrees.

Applicant notes Yokoyama discloses, in FIGs. 3 and 4, a transparent electrode 6a (common electrode) located on an upper substrate 1a, and a transparent electrode 6b (data electrode) located on a lower substrate 1b. Based upon the configuration of the LCD device illustrated in FIGs. 3 and 4, a vertical electric field would be applied to the liquid crystal layer 13. This is contrary to what is recited in independent claim 1 of the present application.

Specifically, claim 1 recites “a plurality of common electrodes and data electrodes on the first substrate, wherein the common and data electrodes apply an electric field to the liquid crystal layer that is parallel to the first substrate”.

Further, Applicant respectfully submits Zhang fails to teach or suggest “at least one dummy pattern overlapping at least one portion of the data lines for repairing an open region of the data lines” as recited in independent claim 1. Applicant notes Zhang discloses an active matrix liquid crystal display that includes sampling circuit input lines that are in contact with the image data signal lines and include dummy conducting lines extending to a buffer circuit (see, Abstract). However, Zhang fails to remedy the deficient teachings of Yokoyama such that one of ordinary skill in the art would be motivated by the teachings of Zhang to modify the device of Yokoyama to obtain an in-plane switching mode liquid crystal display device having the combined features recited in independent claim 1. Specifically, the resulting liquid crystal display device of the proposed Yokoyama and Zhang combination would fail to include “a plurality of common electrodes and data electrodes on the first substrate, wherein the common and data electrodes apply an electric field to the liquid crystal layer that is parallel to the first substrate; and at least one dummy pattern overlapping at least one portion of the data lines for repairing an open region of the data lines” as recited in independent claim 1. Accordingly, claim 1 and its dependent claims 2-9 and 11 are allowable over any combination of Yokoyama and Zhang.

Independent claim 20 is allowable over Yokoyama and Zhang because Yokoyama and Zhang fail to teach or suggest an in-plane switching mode liquid crystal display device that includes, among other features, “a plurality of common electrodes and data electrodes on the first substrate, wherein the common and data electrodes apply an electric field to the liquid crystal layer that is parallel to the first substrate... wherein the dummy pattern is integral with at least one of the common electrodes for repairing an open region of the data lines, wherein a portion of the at least one of the common electrodes integral with the dummy pattern is electrically insulated from the common line.” Because Yokoyama and Zhang fail to teach or suggest at least these combined features of claim 20, claim 20 and its dependent claims 21-27 are allowable over Yokoyama and Zhang.

Reconsideration and withdrawal of the rejection of claims 1-9, 11 and 20-27 are requested.

Application No.: 09/940,544

Docket No.: 8733.497.00-US

Amendment dated December 21, 2004

Reply to non-final Office Action dated September 21, 2004

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If the Examiner deems that a telephone conversation would further the prosecution of this application, the Examiner is invited to call the undersigned at (202) 496-7500.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: December 21, 2004

Respectfully submitted,

By Valerie Hayes
Valerie Hayes

Registration No.: 53,005
MCKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, DC 20006
(202) 496-7500
Attorney for Applicant